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REMARKS

Claims 1, 3-14, and 16-26 are pending in the application. Claims 3 and 16 have been canceled. Claims 1 and 14 have been amended. Applicants respectfully request entry of the foregoing amendment to Claims 1 and 14 prior to further examination. No new matter has been introduced. Acceptance is respectfully requested.

Claim Amendments

Claims 1 and 14 have been amended. Support for these amendments can be found at least in the Specification, page 4, line 26 through page 5, line 3 and in now canceled claims 3 and 16.

35 U.S.C. § 102 Rejection

Claims 1, 3-6, 10-14, 16-19, and 23-26 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Aggarwal et al. (U.S. Patent No. 5,943,478, hereinafter "Aggarwal").

The present invention provides a system and method for using standard communication protocols, such as HTTP protocol, for implementing a server driven "push" technology. Generally, once a client 10 establishes a connection to a server 12, the server 12 maintains the connection by sending a "no message" flag (16, 18, 20) or indicator to the client 10. The client 10 ignores the "no message" flags (16, 18, 20) that it receives, but when the server 12 needs to send information to the client 10 (i.e., there exists a substantive message 26 on the server 12), the server 12 sends a "message pending" flag 22 to the client 10. Then the server 12 may send the substantive message 26 to the client 10 or the client 10 may request the pending substantive message 26 from the server 12. (See Fig. 1 and Specification, page 4, line 25 - page 5, line 10).

Aggarwal provides a system and method in which a server employs a "MIME-multipart push" technique for instantly sending messages to a recipient behind a firewall as parts of a long multipart message. According to this system and method, a client C first connects through a

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firewall F to a Home Server C (Fig. 4B). Then, the client C sends an HTTP post message 421 to the home server C (Fig. 4C). Next, the home server C sends the client C an HTTP response 431 which is the first part of a MIME-multipart sequence (Fig. 4D). At this point, the client C is logged onto the system. Thereafter, the home server C can send to the client C any sequence of messages so long as the back connection remains open. Once every four minutes, the home server C sends the client C a "blank" message 444 or "ping" to keep the firewall connection alive. (See Figs. 4B-4D and Col. 4, lines 23-60).

A "blank" message of Aggarwal is not "a single character indicator pre-established to indicate a non-substantive message" as now claimed in amended Claims 1 and 14. Rather the "blank" message is, as the name suggests, blank; Figure 4E of Aggarwal shows that the blank message 444 is a "ping" packet. (See Aggarwal, Fig. 4E). A ping, as known in the art, is a (1) a command that calls an IP address or (2) a command that sends an Internet Control Message Protocol (ICMP) echo-request packet to a gateway, router, or host with the expectation of receiving a reply. When Aggarwal sends an actual message 442 it is a "flash" message and contains an X-MESSAGE field. (See Aggarwal, Fig. 4E). As such, and made evident by Figure 4E the X-MESSAGE field is not found in the "blank" message, and thus it contains no content. (See Aggarwal, Fig. 4E). However, the single character indicator of the present invention is just that, a single character which contains information as to whether a message exists at the server. Thus, the "blank" message of Aggarwal teaches away from the single character indicator (indicative of type of message) of the present invention because it contains no content and hence no indication of any kind. Independent Claims 1 and 14 have been amended to include this limitation and are therefore patently distinct from Aggarwal. Therefore, Applicants respectfully request that the rejections of now amended base Claims 1 and 14 be withdrawn.

Further, the message of Aggarwal is not a "predefined signal indicating existence at the server of the substantive message" as claimed in Claims 4 and 17, nor does Aggarwal teach the use of such a signal. In the present invention, the client receives one of two predefined signals: the "no message" signal or the "message pending" signal. Unlike the "no message" signal, in

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response to the "message pending" signal, the client computer generates a data connection request addressed to the web server. (See Spec., page 6, lines 22-24). Only upon receipt of this request will the server forward the message to the client. (See Spec., page 6, lines 24-26). In this manner, the message is sent only when the client is prepared to accept it. (See Spec., page 3, lines 14-16). In contrast, the user message of Aggarwal is forwarded to the recipient without any prior predefined signal. In addition, the message entered by the sending user, such as "HI STEVE, HOW ARE YOU DOING?", has no predefined component. (See Aggarwal, Fig. 4E). Thus, at no time does Aggarwal transmit a predefined signal to indicate the existence at the server of a substantive message. At the very least, Claims 4 and 17 are patently distinct from Aggarwal, and Applicants therefore respectfully request that the rejections of these Claims be withdrawn.

Claims 4-6 and 10-13 depend from now amended independent Claim 1 and Claims 17-19 and 23-26 depend from now amended independent Claim 14 and are allowable for the same reasons as given above. Applicants respectfully request that the rejection of these claims be withdrawn.

35 U.S.C. § 103 Rejection

Claims 7-9 and 20-22 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Aggarwal as applied to claims 1 and 14 above.

As explained above, Aggarwal does not teach, suggest or otherwise make obvious each and every limitation of now amended independent Claims 1 and 14. Since Claims 7-9 depend from independent Claim 1 and Claims 20-22 depend from independent Claim 14, Applicants respectfully request that the rejection under 35 U.S.C. 103(a) be withdrawn for at least the same reasons.


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CONCLUSION

In view of the above amendments and remarks, it is believed that Claims 1, 4-14, and 17-26 are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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